

JUN 2 5 2001

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TECH CENTER 1600/2900

RAW SEQUENCE LISTING DATE: 06/01/2001 PATENT APPLICATION: US/09/733,757 TIME: 11:16:56

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3 <110> APPLICANT: Mack, David Gish, Kurt Wilson, Keith

7 <120> TITLE OF INVENTION: NOVEL METHODS OF DIAGNOSING COLORECTAL CANCER, COMPOSITIONS

AND METHODS

OF SCREENING FOR COLORECTAL CANCER MODULATORS 10 <130> FILE REFERENCE: A-69796/DJB/JJD 12 <140> CURRENT APPLICATION NUMBER: US 09/733,757 13 <141> CURRENT FILING DATE: 2000-12-08 15 <160> NUMBER OF SEQ ID NOS: 3 17 <170> SOFTWARE: PatentIn version 3.0 19 <210> SEQ ID NO: 1 20 <211> LENGTH: 2103 21 <212> TYPE: DNA

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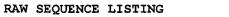
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	Val	Ala		Met	Pro	Leu	Val		Ala	Lys	Leu	Arg		TTe	GIn	Ala	
169			545					550	_4_				555				1701
	tgg																1791
173	Trp	560	ser	ьeu	Pro	GIU	565	СТА	ьeu	Thr	Tyr	570	ьeu	vaı	Arg	Pne	
	aaa		200	222	222	~ a +		a++	at a	aaa	~++		+ - +	220	200	++~	1839
	Lys		-			_	-		_		_					_	1039
177	_	σгу	Set	пуэ	пуз	580	тэр	116	Deu	СТУ	585	Ser	тут	ASII	Ary	590	
	att	aaa	att	gat	aca		acc	aaa	att	cca		aca	aca	taa	ana		1887
	Ile																1007
181	110	2,0		пор	595			011		600					605	1110	
	aca	aat	atc	aaa		taa	aat	αta	aac		gaa	acc	caa	cag		atc	1935
	Thr																
185				610		F			615	~ - <u>r</u> -			5	620			
187	atc	qaq	ttt	qac	caa	aac	qtc	ttt		gct	ttc	acc	tqc	ctq	agt	qca	1983
	Ile																
189			625	-				630					635				
191	gat	tgc	aag	att	gtg	cac	gag	tac	att	ggc	ggc	tac	att	ttc	ttg	tcc	2031
	Asp																
193		640					645					650					
	acc																2079
	Thr	Arg	Ser	Lys	Asp		Asn	Glu	Thr	Leu		Glu	Asp	Leu	Phe		
197	655					660					665					670	

RAW SEQUENCE LISTING

DATE: 06/01/2001 PATENT APPLICATION: US/09/733,757 TIME: 11:16:57

Input Set : A:\es.txt

Output Set: C:\CRF3\06012001\I733757.raw

		ttg						taa										2103
	Lys	Leu	Thr	Gly		Gln	Asp											
201	.01	a. a.			675													
		0> SI																
		1> LI			/ /													
		2> T			Uome		oi on	_										
		3> 01 0> S1				J Sal	orem;	5										
		Leu				Asn	Phe	Thr	Phe	Δla	Ser	Trn	Glu	T.e.11	V=1	V=1		
212		шси	DCI	DCI	5	пор	THE	1111	1110	10	261	пр	Gru	neu	15	vaı		
		Val	Asp	His	Pro	Asn	Glu	Glu	Gln		Lvs	Asp	Val	Thr		Arg		
216	_		-	20					25		-	•		30		,	1	
219	Val	Ser	Gly	Asp	Leu	His	Val	Gly	Gly	Val	Met	Leu	Lys	Leu	Val	Glu		
220			35					40					45					
	Gln	Ile	Asn	Ile	Ser	Gln	Asp	Trp	Ser	Asp	Phe	Ala	Leu	Trp	Trp	Glu		
224		50					55					60						
		Lys	His	Cys	Trp		Leu	Lys	Thr	His	_	Thr	Leu	Asp	Lys	-		
228		,	6 1			70	-	-	_		75	_	~ 1		_	80		
	GLY	Val	GIn	Ala	_	Ата	Lys	Leu	Leu		Thr	Pro	GIn	His	-	Met		
232	T	7\	т	7)	85	Desc	7\	T	T	90 Mot	77 n 3	7)	T	70	95	0		
235	ьeu	Arg	ьeu	Arg	ьeu	Pro	Asn	ьеи	ьуs 105	мет	vaı	Arg	ьeu		vaı	Ser		
	Dha	Ser	Δla		V = 1	Dha	Luc	Λla		Sar	Aen	Tla	Cue	110	Tla	Lou		
240	1116	Ser	115	Val	Val	1116	пуз	120	vaı	261	тэр	116	125	цуз	116	Leu		
	Asn	Ile		Ara	Ser	Glu	Glu		Ser	Leu	Leu	Lvs		Ser	Glv	Asp		
244		130	9	9			135					140			V-1			
247	Tyr	Phe	Lys	Lys	Lys	Lys	Lys	Lys	Asp	Lys	Asn	Asn	Lys	Glu	Pro	Ile		
248	145				_	150		_		_	155		_			160		
251	Ile	Glu	Asp	Ile	Leu	Asn	Leu	Glu	Ser	Ser	Pro	Thr	Ala	Ser	Gly	Ser		
252					165					170					175			
	Ser	Val	Ser		Gly	Leu	Tyr	Ser	_	Thr	Met	Thr	Pro		Tyr	Asp		
256	_	T 1	_	180	m)	_	~ 7	_	185	en1		1	_	190	~	_		
	Pro	Ile		GLY	Thr	Pro	Ата		Ser	Thr	Met	Thr		Phe	Ser	Asp		
260	C02	Dro	195	Th~	Clu	Cln	7.00	200	C0.2	Tlo	T 011	7.1.	205	C~~	Cla	Dwo		
264	261	Pro 210	пеп	1111	Giu	GIII	215	Суз	261	116	ьец	220	rne	Ser	GIII	FIO		
	Pro	Gln	Ser	Pro	Glu	Ala		Ala	Asn	Met	Tur		Pro	Ara	Ser	T.e.ii		
	225	0	001		0_0	230					235	· · · · ·		9	001	240		
		Asp	Lvs	Ala	Lvs		Asn	Ala	Glv	Trp		Asp	Ser	Ser	Arg			
272		-	-		245				-	250		-			255			
275	Leu	Met	Glu	Gln	Gly	Ile	Gln	Glu	Asp	Glu	Gln	Leu	Leu	Leu	Arg	Phe		
276				260					265					270				
	Lys	Tyr	Tyr	Ser	Phe	Phe	Asp		Asn	Pro	Lys	Tyr	Asp	Ala	Val	Arg		
280			275					280					285					
	Ile	Asn	Gln	Leu	Tyr	Glu		Ala	Arg	Trp	Ala		Leu	Leu	Glu	Glu		
284		290	_	-		۵.	295		_			300		_		_		
		Asp	Cys	Thr	GLu		Glu	Met	Leu	IIe		Ala	Ala	Leu	GIn			
	305	-1 .	0	T	T	310	т	0	70.7 -	~ 1	315	O1	7\	DI	70 T =	320		
291	Hls	Ile	Ser	ьуѕ	ьeu	ser	ьeu	ser	Ala	GLu	Thr	GIn	Asp	rne	Ala	GTA		

RAW SEQUENCE LISTING

PATENT APPLICATION: US/09/733,757 TIME: 11:16:57

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Input Set : A:\es.txt

Output Set: C:\CRF3\06012001\I733757.raw

292					325					330					335	
295	Glu	Ser	Glu	Val	Asp	Glu	Ile	Glu	Ala	Ala	Leu	Ser	Asn	Leu	Glu	Val
296				340					345					350		
299	Thr	Leu	Glu	Glv	Glv	Lys	Ala	Asp	Ser	Leu	Leu	Glu	Asp	Ile	Thr	Asp
300			355	_	-	-		360					365			
	Tlo	Dro		T 011	ЛΙэ	7) en	7 cn		Tuc	Lou	Pho	λνα		Lys	Tuc	Tou
	116		цуз	ьeu	Ата	ASP		ьец	пуз	ьеu	rne	_	LIO	пÃ2	пдэ	пеп
304	_	370	_			_	375	_	_			380	_	_		
307	Leu	Pro	Lys	Ala	Phe	Lys	Gln	Tyr	Trp	Phe	Ile	Phe	Lys	Asp	Thr	
308	385					390					395					400
311	Ile	Ala	Tyr	Phe	Lys	Asn	Lys	Glu	Leu	Glu	Gln	Gly	Glu	Pro	Leu	Glu
312			-		405		_			410		-			415	
	Lvs	T.e.11	Asn	T.e.11	Ara	Glv	Cvs	Glu	Val		Pro	Asn	Val	Asn		Δla
316	Lys	пси	11011	420	1119	O.r.y	Cys	014	425	Val	110	2150	Vai	430	Val	1114
	0.1	20			0.1	T1	T	T		T 3 .	Б		D 7 .		0.3	
	GTĀ	Arg	-	Phe	GTĀ	тте	гàг		Leu	тте	Pro	Val		Asp	GTA	Met
320			435					440					445			
323	Asn	Glu	Met	Tyr	Leu	Arg	Cys	Asp	His	Glu	Asn	Gln	Tyr	Ala	Gln	Trp
324		450					455					460				
327	Met	Ala	Ala	Cvs	Met	Leu	Ala	Ser	Lvs	Glv	Lvs	Thr	Met	Ala	Asp	Ser
	465			0,0		470		501	2,0	011	475		1100	1124		480
		М	C3	D	C1		T	7	T1-	T		Dh	T	7) (- L	
	Ser	Tyr	GIN	Pro		vai	Leu	ASI	тте		ser	Pne	ьeu	Arg		гàг
332					485					490					495	
335	Asn	Arg	Asn	Ser	Ala	Ser	Gln	Val	Ala	Ser	Ser	Leu	Glu	Asn	Met	Asp
336				500					505					510		
	Met	Asn	Pro	Glu	Cvs	Phe	Val	Ser	Pro	Ara	Cvs	Ala	Lvs	Lys	His	Lvs
340			515		- 1 -			520		5	- 1 -		525	-1-		2
	Sor	Tuc		Lou	ΛΊэ	λΙэ	Δνα		Lou	Glu	7.1.2	Hic		Asn	Val	Λla
	Ser	_	GIII	пеп	лια	ліа	_	116	пеа	GIU	лта		GIII	H211	vaı	лта
344		530	_	_			535	_	_	_	_,	540	~ .			
		Met	Pro	Leu	Val		Ala	глs	Leu	Arg		lle	GIn	Ala	Trp	
348	545					550					555					560
351	Ser	Leu	Pro	Glu	Phe	Gly	Leu	Thr	Tyr	Tyr	Leu	Val	Arg	Phe	Lys	Gly
352					565					570			_		575	_
	Ser	Lvs	Lvs	Asp	Asp	Tle	Len	Glv	Val	Ser	Tvr	Asn	Ara	Leu	Tle	Lvs
356	001			580				011	585		- 1 -		9	590		_,,
	т1.	7 00	7. 7. ~		Πb ×	C1	т1.	Dro			mb ×	T ××	7 ~~		mb ×	7.00
	тте	ASP		ALa	TIIL	СТУ	TTE		Val	TIIT	TIIL	пр	_	Phe	1111	ASII
360			595					600	_				605	_	_	
363	Ile	Lys	Gln	Trp	Asn	Val		Trp	Glu	Thr	Arg	Gln	Val	Val	Ile	Glu
364		610					615					620				
367	Phe	Asp	Gln	Asn	Val	Phe	Thr	Ala	Phe	Thr	Cys	Leu	Ser	Ala	Asp	Cys
368	625	_				630					635				-	640
		Tle	Val	His	Glu		Tle	Glv	Glv	Tur		Phe	Len	Ser	Thr	
372	цуо	110	VUI	1110	645	+ Y +		019	O ± y	650		1110	пса	001	655	1119
	~	-	70	01		61	m1	Ŧ	70		70	T	D1.			T
	Ser	ьys	Asp		Asn	Glu	Thr	ьeu		GIU	Asp	ьeu	Pne	His	ьys	ьeu
376				660					665					670		
379	Thr	Gly	Gly	Gln	Asp											
380			675													
	<210	D> SE	EO II	ON C	: 3											
	<213															
	<212															
					FT 1											
386	<21.	5> OF	KGAN.	ISM:	unki	IOMU										

Please Note:

Use of n and/ r Xaa have be n detected in the Sequence Listing. Please review the Sequence Listing to ensure that a corresponding explanation is presented in the <220> to <223> fields of each sequence which presents at least one n or Xaa.

VERIFICATION SUMMARY

PATENT APPLICATION: US/09/733,757

DATE: 06/01/2001 TIME: 11:16:58

Input Set : A:\es.txt

Output Set: C:\CRF3\06012001\I733757.raw

L:399 M:341 W: (46) "n" or "Xaa" used, for SEQ ID#:3